Appl. No. 10/632,190
Amdt. dated December 30, 2008
Reply to Office Action of September 3, 2008

PATENT
Attorney Docket No.: 021756-063100US
Client Ref. No.: OID-2003-032-01

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A computer-implemented method comprising:

    calculating a Levenshtein matrix of a first string and a second string;

    determining a Levenshtein distance from said Levenshtein matrix;

    determining a longest diagonal of equal hamming distance within the Levenshtein matrix;

    determining a ~~largest common~~ substring corresponding to the longest diagonal within ~~from~~ said Levenshtein matrix, the substring being the largest common substring of the first and second strings;

    storing at least one of the Levenshtein matrix, the Levenshtein distance, and the substring in a computer-readable medium; and

    automating at least one of data entry, processing or reporting for a database ~~including at least one of said first or second strings~~ based upon said Levenshtein distance and said largest common substring.

2. (Canceled).

3. (Original) The method according to Claim 1, further comprising calculating a Levenshtein score.

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4. (Original) The method according to Claim 1, further comprising determining the length of the largest common substring.

5. (Original) The method according to Claim 4, further comprising calculating a largest common substring score.

6. (Currently Amended) A <u>computer-implemented</u> method comprising:

    calculating a Levenshtein matrix of a first string and a second string;

    determining a Levenshtein distance from said Levenshtein matrix;

    <u>determining a longest diagonal of equal hamming distance within the Levenshtein matrix;</u>

    determining a ~~largest common~~ substring <u>corresponding to the longest diagonal within</u> ~~from~~ said Levenshtein matrix<u>, the substring being the largest common substring of the first and second strings</u>;

    calculating a Levenshtein score as a function of said Levenshtein distance;

    calculating a largest common substring score as a function of said largest common substring;

    <u>storing at least one of the Levenshtein matrix, the Levenshtein distance, the largest common substring, the Levenshtein score, and the largest common substring score in a computer-readable medium;</u>

    determining a similarity between said first string and said second string as a function of said Levenshtein score and said largest common substring score; and

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automating at least one of data entry, processing or reporting for a database ~~including at least one of said first or second strings~~ based upon said similarity, the database including at least one of said first or second strings.

7. (Previously Presented) The method according to Claim 6, further comprising calculating an acronym score of said first string and said second string.

8. (Original) The method according to Claim 7, further comprising calculating a weighted acronym score comprising a product of said acronym score and an acronym weight factor.

9. (Original) The method according to Claim 6, further comprising:

calculating a weighted Levenshtein score comprising a product of said Levenshtein score and a Levenshtein weight factor;

calculating a weighted largest common substring score comprising a product of said largest common substring score and a largest common substring weight factor; and

calculating a Levenshtein/largest common substring score comprising a sum of said weighted Levenshtein score and said weighted largest common substring score.

10. (Original) The method according to Claim 9, wherein a sum of said Levenshtein weight factor and said largest common substring weight factor is equal to one.

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11. (Original) The method according to Claim 9, further comprising calculating a first weighted numerical score comprising a product of said Levenstein/largest common substring score and a string weight factor.

12. (Previously Presented) The method according to Claim 11, further comprising:

calculating an acronym score of said first string and said second string;

calculating a weighted acronym score comprising a product of said acronym score and an acronym weight factor; and

calculating a second weighted numerical score comprising a sum of said first weighted numerical score and said weighted acronym score.

13. (Original) The method according to Claim 12, wherein a sum of said string weight factor and said acronym weight factor is equal to one.

14. (Currently Amended) A computer-readable medium containing one or more sequences of instructions which when executed by a computing device cause the computing device to implement a method for determining a similarity comprising:

calculating a Levenshtein matrix of a first string and a second string;

determining a Levenshtein distance from said Levenshtein matrix;

determining a longest diagonal of equal hamming distance within the Levenshtein matrix;

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determining a ~~largest common~~ substring <u>corresponding to the longest diagonal within</u> ~~from~~ said Levenshtein matrix<u>, the substring being the largest common substring of the first and second strings</u>;

calculating a Levenshtein score as a function of said Levenshtein distance;

calculating a largest common substring score as a function of said largest common substring;

calculating a first numerical score as a function of said Levenshtein score and said largest common substring score; and

automating <u>at least one of</u> data entry, processing or reporting for a database ~~including at least one of said first or second strings~~ based upon said first numerical score<u>, the database including at least one of said first or second strings</u>.

15. (Previously Presented) The computer-readable medium according to Claim 14, wherein calculating said Levenshtein score comprises:

subtracting the resultant of dividing said Levenshtein distance by an average of a length of said first string and a length of said second string from one.

16. (Previously Presented) The computer-readable medium according to Claim 14, wherein calculating said largest common substring score comprises:

determining a length of said largest common substring from said Levenshtein matrix; and

dividing said length of said largest common substring by an average of a length of said first string and a length of said second string.

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17. (Original) The computer-readable medium according to Claim 14, wherein calculating said first numerical score comprises:

calculating a weighted Levenshtein score comprising a product of said Levenshtein score and a Levenshtein weight factor;

calculating a weighted largest common substring score comprising a product of said largest common substring score and a largest common substring weight factor; and

summing said weighted Levenshtein score and said weighted largest common substring score.

18. (Currently Amended) The computer-readable medium according to Claim 14, further comprising:

calculating an acronym score;

calculating a second numerical score as a function of said first numerical score and said acronym score; and

further automating at least one of said data entry, processing or reporting based upon said second numerical score.

19. (Original) The computer-readable medium according to Claim 18, wherein calculating said second numerical score comprises:

calculating a weighted Levenshtein score comprising a product of said Levenshtein score and a Levenshtein weight factor;

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calculating a weighted largest common substring score comprising a product of said largest common substring score and a largest common substring weight factor;

calculating a Levenshtein/largest common substring score comprising a sum of said weighted Levenshtein score and said weighted largest common substring score;

calculating a weighted Levenshtein/largest common substring score comprising a product of said Levenshtein/largest common substring score and a Levenshtein/largest common substring weight factor;

calculating a weighted acronym score comprising a product of said acronym score and an acronym score weight factor; and

summing said weighted Levenshtein/largest common substring score and said weighted acronym score.

20. (Currently Amended) The computer-readable medium according to Claim 19, further comprising:

utilizing said first numerical score for automating said at least one of data entry, processing or reporting, when said first string and said second string comprise numerical-type strings; and

utilizing said second numerical score for automating said at least one of data entry, processing or reporting, when said first string or said second string comprise character-type strings.